



Tesselation 37 (I)

Suite: Tesselation Party!

by Arya Akhavan (October 2014)

Angles for R.I. = 1.620

72 + 12 girdles = 84 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.202

P/W = 0.532 C/W = 0.251

Vol./W³ = 0.419

PAVILION

P1	40.61°	22-26-70-74	Cut to centerpoint.
P2	41.00°	23-25-71-73	Meet at culet.
G1	90.00°	24-72	Set stone length.
G2	90.00°	13-35-61-83	Meet P1, P2, G1
P3	66.57°	13-35-61-83	Level girdle.
P4	40.91°	21-27-69-75	Meet P1, P2, G1, G2, P3
P5	40.68°	20-28-68-76	Meet P1, P4
P6	41.46°	19-29-67-77	Meet P3, P4, P5
P7	70.92°	10-38-58-86	Meet P3, P4, P5, P6
P8	75.00°	96-48	Meet P5, P6
G3	90.00°	10-38-58-86	Level girdle.
G4	90.00°	96-48	Level girdle.
P9	42.08°	24-72	Level girdle.

CROWN

C1	44.57°	24-72	Set girdle width.
C2	49.62°	13-35-61-83	Level girdle.
C3	52.02°	10-38-58-86	Level girdle.
C4	62.77°	96-48	Level girdle.
C5	51.61°	03-45-51-93	Meet G3, G4, C3, C4
C6	31.83°	18-30-66-78	Meet G1, G2, C1, C2
C7	27.48°	13-35-61-83	Meet C2, C3, C5
C8	26.22°	08-40-56-88	Meet C3, C5, C7; C4, C5
C9	15.87°	96-48	Meet C4, C5, C8
C10	23.58°	24-72	Meet C1, C6
C11	17.45°	24-72	Meet C6, C7, C10
C12	15.36°	18-30-66-78	Meet C6, C7, C10, C11; C7, C8, C9
C13	6.00°	96-48	Meet C7, C8, C9; C11, C12

For some reason, the I-type designs in this suite are very hard to get to work, and since the crown is technically a keel instead of an apex or table, the pavilion usually requires a counter-keel. Notice how the pavilion facets are all very close in angle and index? That means they'll all cut very, VERY fast. Prepolish them in. Works in materials from topaz to rutile (RI = 1.61 - 2.62) with no changes, but should work in closed-C tourmalines.

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